

## ABSTRACT

A multilayer film reflector capable of simply correcting a wavefront phase and a method of forming the reflector are disclosed.

For this purpose, a reflector using reflection by a multilayer film is disclosed. This multilayer film is formed in a number of cycles larger than that necessary to substantially saturate a reflectance, and a wavefront phase of emerging rays is adjusted by cutting away the multilayer film in accordance with an amount of adjustment of the wavefront phase.

Further, the formation of a correction film as well as the formation of a multilayer larger than necessary to substantially saturate the reflectance permits the correction of a phase by cutting away also the multilayer film when the phase cannot be corrected only by cutting away the correction film, whereby the phase can be corrected more accurately.